



RP SEQUENCE FROM N.A.  
 RA MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;  
 RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge U.G.,  
 RA Klausner R.D., Collins F.S., Wagner L., Sherman C.M., Schuler G.D.,  
 RA Altshuler S.F., Zeeberg B., Bluetow K.H., Schaefer C.F., Bhat N.K.,  
 RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Heich F.,  
 RA Datschenko L., Marsina K., Farmer A.A., Rubin G.M., Hong L.,  
 RA Stadton M., Soares M.B., Bonaldi M.F., Casavant T.L., Schleier T.E.,  
 RA Brownstein M.J., Ueda T.B., Tohyiuki S., Cantucci P., Prange C.,  
 RA Raba S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullaly S.J.,  
 RA Richards S., McEwan P.J., McKernan K.J., Malek J.M., Gay L.J., Hulyk S.W.,  
 RA Villalon D.K., Muzny K.C., Hale S., Garcia A.J., Lu X., Gibbs R.A.,  
 RA Whiting M., Helton E., Kettelman M., Maden A.C., Rodriguez Y., Bouffard G.G.,  
 RA Blakeley R.W., Touchman J.W., Green E.D., Dickson M.C.,  
 RA Rodriguez A.C., Trichwood J., Schmutz J., Myers R.M.,  
 RA Butcherfield Y.S.N., Krzywinski M.T., Skalska U., Smalhus D.B.,  
 RA Schnerch A., Schein J.E., Jones S.J.W., Marra M.A.,  
 RA "Generation and initial analysis of more than 15,000 full-length human  
 RL and mouse cDNA sequences.";  
 RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).  
 RP [2]  
 RP SEQUENCE OF 65-74; 77-91; 102-116; 156-170; 194-216 AND 309-320,  
 RP SUBCELLULAR LOCATION, AND DEVELOPMENTAL STAGE.  
 RP TISSUE=Brain;  
 RP MEDLINE=97288622; PubMed=9144527; DOI=10.1006/hbrc.1997.6447;  
 RA Abe T.K., Tanaka H., Iwanaga T., Odani S., Kuwano R.;  
 RA "The presence of the 50-kDa subunit of dynein complex in the nerve  
 RL growth cone.";  
 RL Biochem. Biophys. Res. Commun. 233:295-299 (1997).  
 RP [3]  
 RP INTERACTION WITH BICD2.  
 RX MEDLINE=21376052; PubMed=11483508; DOI=10.1093/emboj/20.15.4041;  
 RA Hoogenraad C.C., Altmanova A., Howell S.A., Dortland B.R.,  
 RA de Zeeuw C.I., Willemsen R., Visser P., Grosveld F., Galjart N.;  
 RT "Mammalian golgi-associated Bicardal-D2 functions in the dynein-  
 RL dynein pathway by interacting with these complexes.";  
 RL EMBO J. 20:4041-4054 (2001).  
 CC -1- FUNCTION: Modulates cytoplasmic dynein binding to an organelle,  
 CC and plays a role in prometaphase chromosome alignment and spindle  
 CC organization during mitosis. May play a role in synapse formation  
 CC during brain development.  
 CC -1- SUBUNIT: Subunit of dynein, a multiprotein complex associated  
 CC with dynein (by similarity). Interacts with BICD2.  
 CC -1- SUBCELLULAR LOCATION: Cytoplasmic and membrane-associated.  
 CC -1- DEVELOPMENTAL STAGE: Present at high levels in both cytoplasmic  
 CC and membrane-associated forms in neonates. Levels of membrane-  
 CC associated form are greatly reduced in the adult.  
 CC -----  
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 CC -----  
 CC EMBL; BC004613; AA004613.1; .  
 DR WGD; MG1:107733; Dctn2.  
 DR InterPro; IPR006996; Dynein1n.  
 DR Pfam; PF04912; Dynein1n.1.  
 KW Coiled coil; Cytokeleton; Direct protein sequencing; Dynein;  
 KW Membrane; Microtubule; Motor protein.  
 FT INIT MET 0  
 FT DOMAIN 98 0  
 FT DOMAIN 131 131  
 FT DOMAIN 214 244  
 SS 401 AA; 43985 MW; 153584RBD5940BRC PRO64;  
 Query Match 97.8%; Score 135; DB 1; Length 401;  
 Best Local Similarity 97.8%; Score 135; DB 1; Length 401;